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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,551	06/29/2006	Xin Qi	36290-0408-00-US	4948
23973 7590 07/22/2010 DRINKER BIDDLE & REATH ATTN: INTELLECTUAL PROPERTY GROUP ONE LOGAN SQUARE, SUITE 2000 PHILADELPHIA, PA 19103-6996				
EXAMINER HOLLOMAN, NANETTE				
ART UNIT		PAPER NUMBER		
1612				
NOTIFICATION DATE		DELIVERY MODE		
07/22/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DBRIPDocket@dbi.com

penelope.mongelluzzo@dbi.com

### Office Action Summary

**Application No.**

10/578,551

**Applicant(s)**

QI ET AL.

**Examiner**

NANNETTE HOLLOMAN

**Art Unit**

1612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 May 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-4, 10-13, 15-17, 31 and 33-36 is/are pending in the application.
- 4a) Of the above claim(s) 34-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-4, 10-13, 15-17, 31 and 33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Applicants' arguments, filed May 13, 2010, have been fully considered. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

#### ***Election/Restrictions Rejoinder Request***

Applicant request for rejoinder of claims 34-36 is acknowledged, however the request is denied. As previously asserted, the technical feature linking the claims is *administering a food composition*. Kaufman disclose administering a food composition for treating, therefore, no special technical feature exists among the different groups because the inventions in Groups I-IV fail to make a contribution over the prior art and therefore are not "special". Accordingly, the restriction is maintained.

***Claim Rejections - 35 USC § 103***

1) Claims 2-4, 10-11, 13-16, 31 and 33 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kaufman (US Patent No. 5,605,893) by itself or in view of Anderson et al. (Starch, Vol. 54, 2002, pp. 401-409). This rejection is maintained.

**Applicant's Arguments**

Applicant argues the object of Anderson et al. is to provide a slowly digestible starch and the heat moisture treatment of waxy and non-waxy corn starch did not result in significant decreases in starch digestibility. Applicant also argues one of ordinary skill would not be motivated to use the starch of Anderson in the food product of Kaufman since beneficial properties could not have been obtained since Anderson teaches that the heat moisture treatment regime as applied to waxy maize starch has no physical or biochemical effect on maize starch. Applicant further argues the present application teaches a quite different method of heat moisture treatment of starch that renders the treated starch with quite exceptional and unexpected properties. Applicant argues Anderson teaches away from applying heat moisture treatment to waxy maize starch because the process according to the Anderson has no effect on glucose release. Applicant's arguments have been fully considered but they are not persuasive.

**Examiner's Response**

In regard to waxy-corn starch, Anderson et al. disclose heat-moisture treated waxy and non-waxy corn (maize) starches all showed reduced digestibility relative to

the respective controls, which is shown in Fig. 6, p. 406. Therefore, providing the motivation to use the waxy corn starch in the treatment of Kaufman and also providing why Anderson does not teach away. Anderson further disclose slow digesting starch are absorbed slowly and suggest controlling increase in blood glucose levels after a meal, which would suggest reducing the initial "spike" in blood glucose levels (p. 401, column 1). This slow digesting and slow absorption would further suggest a prolonged release of said glucose, since the digesting and absorption is prolonged. In regard to the instructions of instant claim 31, Kaufman in view of Anderson encompass the claims, therefore as previously asserted patentable weight need not be given to printed matter absent a new and unobvious functional relationship between the printed matter and the substrate.

In regard to applicant's alleged unexpected results, as shown by Bhattacharya et al., as previously asserted Kaufman discloses maintaining blood sugar levels above 60 mg/dl, which is converted to 3.33 mmol/l for as long as 8-9 hours (column 4, lines 28-30). Furthermore, as disclosed supra, Anderson et al. disclose slow digesting starch are absorbed slowly and suggest controlling increase in blood glucose levels after a meal, thereby providing a prolonged glucose release profile and the motivation to use heat-moisture treated starches in the treatment of Kaufman. Therefore, the results appear to be expected properties of heat-moisture treated.

2) Claims 2-4, 11-14, 17, 31 and 33 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hansson et al. (WO 02/34271 A1) by itself or in view of Anderson et al. (Starch, Vol. 54, 2002, pp. 401-409). This rejection is maintained.

**Applicant's Arguments**

Applicant argues for the same reason provided above in response to the rejection of the claims over Kaufman in view of Anderson et al., there would have been no motivation for one skilled in the art to adopt a hydrothermally treated corn starch from Anderson et al., either waxy or non-waxy, for use as the starch in the food composition of Hansson et al. Applicant's arguments have been fully considered but they are not persuasive.

**Examiner's Response**

In regard to waxy-corn starch, Anderson et al. disclose heat-moisture treated waxy and non-waxy corn (maize) starches all showed reduced digestibility relative to the respective controls, which is shown in Fig. 6, p. 406. Therefore, providing the motivation to use the waxy corn starch in the treatment of Hansson et al. and also providing why Anderson does not teach away. Anderson further disclose slow digesting starch are absorbed slowly and suggest controlling increase in blood glucose levels after a meal, which would suggest reducing the initial "spike" in blood glucose levels (p. 401, column 1). This slow digesting and slow absorption would further suggest a prolonged release of said glucose, since the digesting and absorption is

prolonged. In regard to the instructions of instant claim 31, Hansson in view of Anderson encompass the claims, therefore as previously asserted patentable weight need not be given to printed matter absent a new and unobvious functional relationship between the printed matter and the substrate.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **NANNETTE HOLLOMAN** whose telephone number is (571) 270-5231. The examiner can normally be reached on Mon-Fri 800am-500pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frederick Krass can be reached on 571-272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N. H./  
Examiner, Art Unit 1612

/Frederick Krass/  
Supervisory Patent Examiner, Art Unit 1612